Sessional Paper 584/91
3 Session, 22 Legislature

LEGISLATURE LIBRARY
JUN 1
EDMONTON

January, 1991

HIGH USERS OF HEALTH CARE SERVICES UTILIZATION AND INTERVENTIONS

PROVINCIAL MEDICAL CONSULTANT'S OFFICE
ALBERTA HEALTH

HIGH USERS OF HEALTH CARE SERVICES UTILIZATION AND INTERVENTIONS

1.0 PURPOSE/OBJECTIVES

1.1 To determine if the utilization patterns identified in the groups of registrants who generate more than 25 non referred office visits in a 90 day period exist in the group who generate over 15 visits in a 90 day period.

1.2 To develop an automated system to identify and categorize high users and examine them in relation to the characteristics of high users.

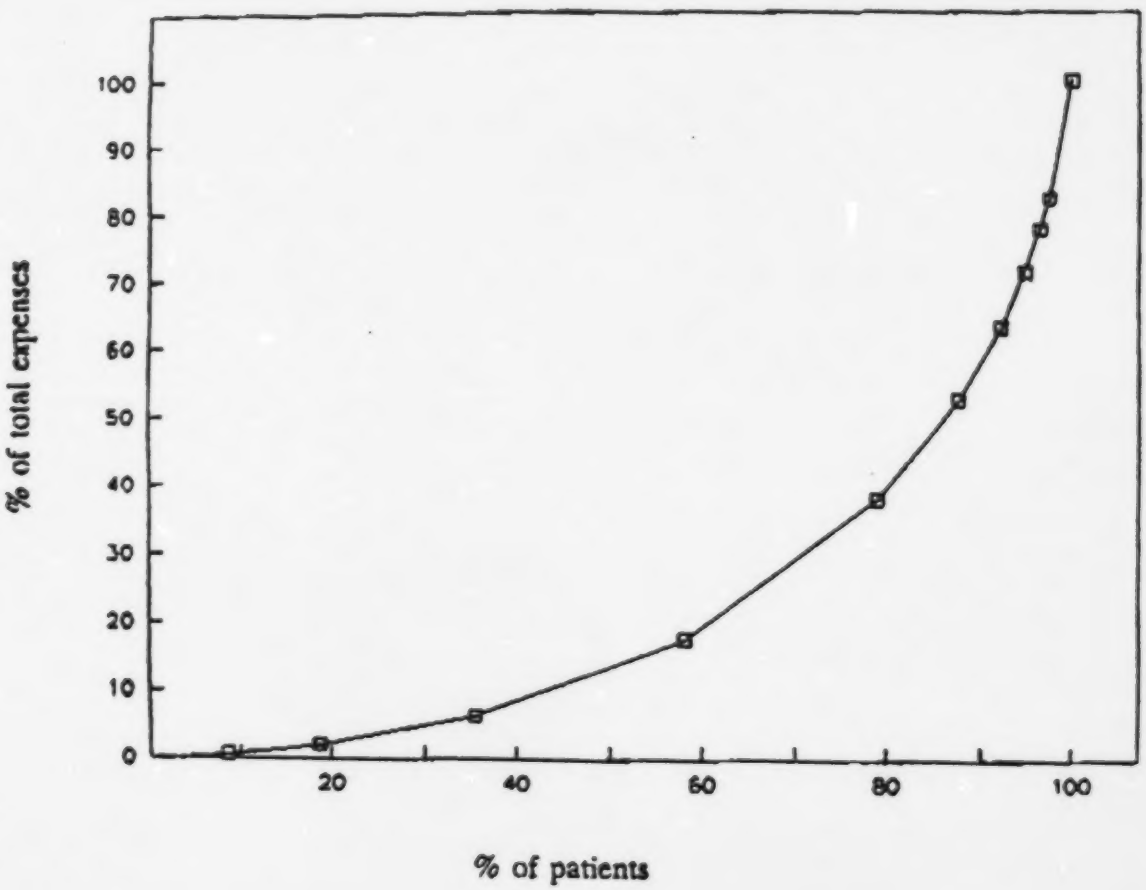
1.3 Identify possible high user interventions.

Profiles of Very High Users of Health Services (Alberta Health 1989), identified 5 distinct categories of high utilization behaviour. Four of the five categories revealed apparently inappropriate, habitual and costly usage of health services. In order to modify or eliminate the utilization behaviours identified in the high user study it is necessary to identify interventions and determine their effectiveness to achieve the desired results: healthier individuals and reduced utilization.

2.0 BACKGROUND

Graph I shows how various percentages of the total population contribute to the total annual payments made by Alberta Health Care for 1988/89 (Alberta Health, 1988/89).

GRAPH I



Non referred office visits are the group of services which are most influenced by patient choice. The average frequency of visits is 2 per registrant per year (Alberta Health, 1988/89). Our previous research has shown in a 90 day time period the proportion of registrants generating office visits are approximately:

no visits	50%
1 to 3 visits	40%
4 to 9 visits	>9%
over 10 visits	<1%

2.1 ORIGINAL HIGH USER STUDY

The initial high user study hypothesized that individuals use health services when they are sick, and that the sicker they are the more health services they will use. To test this hypothesis a review in detail of the records of paid claims for all registrants who generated more than 25 office visits within a 90 day period was undertaken. The review proved the hypothesis to be false. Less than 10% of the study population would be considered sick in the conventional sense. The study identified 5 high user categories. Each category has distinct patterns and distinguishing features.

2.1.1 Psychological Disorder

- Characterized by diagnostic codes suggesting anxiety; and see one or more practitioner and/or specialist.
- Represented 58.8% of the very high user population.

2.1.2 Unclassified High Users

- Characterized by diagnostic codes of vague disorders; see multiple practitioners; and frequent clinics and emergency departments rather than solo practitioners.

- Represented 16.8% of the very high user population.

2.1.3 Drug Abuse

- Characterized by diagnostic codes suggesting drug abuse, migraine or general pains; see multiple practitioners; and frequent clinics and emergency departments rather than solo practitioners.

- Represented 10.9% of the very high user population.

2.1.4 Alcohol Abuse

- Characterized by diagnostic codes for alcohol psychoses, neuritis, diseases of mouth and injuries; frequent clinics and emergency departments rather than solo practitioners.

- Represented 5.2% of the very high user population.

2.1.5 Major Illness

- Characterized by distinct and consistent diagnoses; see one or two practitioners.

- Represented 8.1% of the very high user population.

3.0 FINDINGS

3.1 EXPANDED HIGH USER STUDY

- Four thousand and four hundred and sixty-nine (4469) registrants (0.2% of the general population), generated 15 or more office visits within a 90 day period.

- 66% of high users included in the review lived either in the Cities of Edmonton or Calgary.
- 65% of the high users were female, 35% were male.
- The average age of the study group was 38.2.
- Table A illustrates the distribution of high users amongst the 5 categories.

TABLE A

CATEGORY	NUMBER OF HIGH USERS	% OF TOTAL
Psychological Disorder	2414	54.0%
Unclassified High User	499	11.2%
Suspected Drug Abuse	226	5.1%
Alcohol Abuse	169	3.8%
Major Illness	1161	25.9%

* Table B illustrates the distribution of high users amongst the registrant status groups.

TABLE B

REGISTRATION STATUS	% OF HIGH USERS	% OF PERSONS COVERED*
Direct/Group	57.8	84.4
Social Assistance	24.4	5.4
Treaty Indian	9.7	2.3**
Senior Citizen	7.7	10.0
Widows Pension	0.3	0.2

* Percentages based on number of persons covered by registration status group by Alberta Health Care Insurance at March 31, 1989. Statistical Supplement, Alberta Health Care Insurance Plan, 1987-88 p. 20

** Percentage based on total population of Aborigines in Alberta, 1986. 1986 Census of Canada, File EC86801.

Note Percentages for persons covered do not add up to 100 due to data sources.

- The high users (0.2% of the population) generated 5.2% of expenses generated of the total office visit expenditures for the second quarter of 1989.
- Table C summarizes the distinguishing features of each of the 5 high user categories.

TABLE C

CHARACTERISTIC	PSYCHOLOCIAL DISORDER	UNCLASSIFIED HIGH USER	DRUG ABUSE	ALCOHOL ABUSE	MAJOR ILLNESS
MULTIPLE PRACTITIONERS		X	X	X	
MULTIPLE VISITS	X	X	X	X	
FREQUENT EMERGENCY		X	X	X	
FREQUENT CLINICS		X	X	X	
HABITUAL UTILIZATION	X	X	X	X	

3.2 AUTOMATED CATEGORIZATION SYSTEM

- High users were automatically categorized using the characteristics and usage patterns identified in Profiles of Very High Users of Health Services (Alberta Health, 1989).
- The method of allocating high users to the appropriate category had a 5% error margin. Five percent of high users were included in more than one listing, the listings were checked for duplicates and a manual review of claim histories was conducted.

3.3 IDENTIFICATION OF OPTIONS

An attempt has been made to identify all possible interventions which have been used or suggested in the past. The interventions are briefly described under headings, and the headings will be used for observations as a result of the study.

3.3.1 Restriction/Limitation of Health Care Services

* Limit number of services

  The number of non-referred office services that is covered by Health Care Insurance Plan would be limited, any services received over the limit would be the responsibility of the user. This compares with the limits on chiropractic and physical therapy services.

* Designated practitioner

  The high user enters into an agreement with the Minister of Health to receive primary health services from a designated practitioner.

3.3.2 Awareness/Educational/Informational Interventions

* Distribution of educational/informational material to the general or target population.

* Mail out of Statement of Benefits Paid on a regular basis.

* Personal health cards

  Personal portable funding ensures point of service awareness of cost. The "debit" card is used to pay for health care services provided by an insured health care professional. A signature is required from the registrant authorizing the transaction (Rainbow Report, 1990).

3.3.3 Financial Measures

- Determination of individual and family AHCIP premiums on the basis of previous utilization (Advisory Committee on the Utilization of Medical Services, October,1989).

- Health benefits paid on behalf of registrants would be treated as taxable income. Comprehensive medical care be provided entirely free to the registrant at time of service, but the cost of the services provided in the year to each individual and any dependants would become an item of income on her/his tax return (Kent, 1989, Advisory Committee on the Utilization of Medical Services, October, 1989)

3.3.4 Legal Action

Legal action against individuals who are misusing and/or abusing the health care system is possible under current legislation.

- Narcotic Control Act

  Prohibits registrants from obtaining or seeking narcotics from a physician without first informing him/her of any prescriptions for narcotics obtained within the preceding 30 days.

- Health Insurance Premiums Act

  It is an offence for any person to produce a certificate of registration to a practitioner knowing that the person named on it is not an Alberta resident or is not the person on behalf of whom the certificate is provided - Section 8 (4).

- Health Care Insurance Act

  Monies paid can be recovered for inappropriate, unnecessary or not medically required health services - Section 8 (5) (a) (ii).

3.3.5 Alternative Health Service Interventions

- The medical services being provided may not be the most suitable form of health services to meet the registrants needs. Alternative health services, such a mental health or AADAC services may better meet the needs of the registrants and produce healthier Albertans.

4.0 DISCUSSION

The findings indicate that over 75% of high users identified in this study exhibit utilization behaviour which is apparently inappropriate. In order to modify or eliminate the apparently inappropriate utilization of health care services it is necessary to implement interventions which will result in healthier individuals and a reduction of usage. The interventions should be directed at providing the "right service to the right patient at the right time".

Intervention 3.3.1 Restriction/Limitation of Health Services

- This intervention is currently used by the Medical Services Plan of B.C. to control and monitor the usage of registrants who see multiple practitioners for similar diagnoses in a short timeframe. The Rainbow report suggests that the designation of health care provider may be an outcome of the personal health cards.

- The findings of this study indicate that 20% of high users (11.2% unclassified high user; 5.1% suspected drug abuse; and 3.8% alcohol abuse) see multiple practitioners in comparison 80% see one or two practitioner/specialists (54% psychological disorder; and 25.9% major illness). This intervention would provide the 20% of high users who see multiple practitioners with continuity to their utilization of health services. However, this intervention would not be effective for 54% of high users classified as psychological disorder.

Intervention 3.3.2. Awareness/Educational/Information

* The implementation of this intervention may over time result in a reduction of utilization of services by high users, however, it does not address the immediate health needs of the individuals.

* Mail out of Statement of Benefits Paid was discontinued by the Department because it was not cost effective.

Intervention 3.3.3 Financial Measures

* Financial measures are a universal approach which do not address the health needs of the high users but rather the symptoms of their behaviour.

* The findings indicate almost 50% of high users receive some form of premium subsidy and therefore would be sheltered from any increase in health care premiums or taxation.

* The Department has rejected the suggestions by the Advisory Committee on the Utilization of Medical Services to tie health care premiums to utiiization and to tax benefits (Alberta Health, 1990)

Intervention 3.3.4 Legal Action

* Narcotic Control Act is a Federal Act - findings indicate that approximately 11% of high users identified in this study are suspected drug abusers.

* Health Care Insurance Premiums Act - high users were not identified as fraudulently using certificate of registration.

* Health Care Insurance Act - recovering monies paid for inappropriate utilization provides a financial disincentive but does not address the cause of high usage.

Intervention 3.3.5 Alternative Health Service Interventions

- This intervention attempts to provide high users with a more appropriate form of health service.

- Approximately 75% of high users showed evidence of psychiatric disorder, psychological problems or substance abuse. It is these high users who may benefit from alternative health services such as those provided by mental health or AADAC.

5.0 CONCLUSION

5.1 The 5 categories identified in Profiles of Very High Users of Health Services, are valid for lower levels of utilization.

5.2 An automated categorization process was developed to allocate high users to appropriate groupings.

5.3 Examination of possible interventions suggest that intervention 3.3.5 is most likely to produce the most desirable results, and a study is being planned to follow-up. It is suggested that the recommendation/comments of the Monitoring Committee of Medical Services be sought regarding other interventions.

REFERENCES

Advisory Committee on the Utilization of Medical Services: Barriers to Cost Effective Health Care in Alberta, March 1989

Alberta Health: Department Response to An Agenda For Action: Report of the 1989 Advisory Committee on the Utilization of Medical Services, December 1990

Alberta Health: Profiles of Very High Users of Health Services; October, 1989

Alberta Health: Statistical Supplement, Alberta Health Care Insurance Plan 19888-89

Government of Alberta: An Agenda for Action: Report of the Advisory Committee on the Utilization of Medical Services, October, 1989

Kent, Tom: Getting Ready for 1999; The Institute for Research on Public Policy, 1989

Premier's Commission on the Future Health Care for Albertans: The Rainbow Report: Our Vision For Health Final Report, December, 1989